

Florida Cancer Data System

International Classification of Diseases for Oncology

ICD-O-3

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Basic Concepts

- Primary Site/Topography
- Histology/Morphology
- Behavior
- Grade/Immunophenotype

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ICD-O 3 Structure/Format

- I. Instructions for use
- II. Topography - Numerical List
- III. Morphology - Numerical List
- IV. Alphabetic Index
- V. Appendices: Differences in Morphology
Codes between 2nd and 3rd Editions

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Format Of ICD-O Terms In Numerical List

- Each topographic and morphologic term appears only once
- The first listed term in **Bold Type** is the **Preferred Term**
- Synonyms are indented
- Non indented terms are equivalent terms
- Obsolete term []
- Suggested site code (C__ . _)

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Format And Use Of Alphabetic Index

- The Alphabetic Index is used to code both morphology and topography
- Topography codes begin with the letter 'C'
- Morphology codes are preceded by the letter 'M'

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Ten Component Parts Of ICD-O-3 Code

C 0 0 . 0 [M-] 0 0 0 0 / 0 0

Topography (anatomic site):

Characters **1, 2,** and **3** = Site (**C00** - **C80**)

Character **4** = Subsite (**0** - **9**)

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Ten Component Parts Of
ICD-O-3 Code

C 0 0 . 0 [M-] 0 0 0 0 / 0 0

Morphology (Histologic type):

Characters **5, 6, 7, 8** (8000- 9989)

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Ten Component Parts Of
ICD-O-3 Code

C 0 0 . 0 [M-] 0 0 0 0 / 0 0

Behavior:

Character **9**

0 Benign

1 Borderline

2 Carcinoma in situ

3 Malignant, primary site

6 Malignant Metastatic Site

9 Malignant NOS

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Ten Component Parts Of
ICD-O-3 Code

C 0 0 . 0 [M-] 0 0 0 0 / 0 0

Grade or Immunophenotype:

Character **10**

Grade = **1 - 4** or **9**

Immunophenotype = **5 - 8** or **9**

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Example Of Complete Coding Identification: Grade

How to code well differentiated adenocarcinoma of the cecum

C18.0 **[M-] 8140/31**

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Example Of Complete Coding Identification: Immunophenotype

How to code B cell lymphoma of an axillary lymph node:

C77.3 **[M] 9591/36**

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Principal Rules – ICD-O-3

- Guidelines follow Principal Rules A through K
- You must use the rules to code topography & morphology for every cancer reported
- Some rules apply only to topography (site)
- Some rules apply only to morphology (type)
- Some rules apply to both (topography and morphology)

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Rule A

Topographic Regions & Ill-Defined Sites

- If the diagnosis does not specify the tissue of origin, code the appropriate tissues suggested in the alphabetic index for each ill-defined site in preference to the 'NOS' category
- When no other information is available, assign the site according to the tissue type. Otherwise use ill defined site codes C76.0 – C76.8

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Rule A Examples

- Code liposarcoma of the arm to C49.1 (soft tissue of arm) since liposarcoma primarily arises in soft tissue
- Code melanoma of the arm to C44.6 (skin of arm) since melanoma primarily arises in the skin
- Code osteosarcoma of arm to C40.0 (long bone of arm) since osteosarcoma primarily arises in bone

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Rule B Prefixes

- If a topographic site is modified by a prefix such as peri-, para-, or the like, which is not specifically listed in ICD-O, code to the appropriate ill-defined subcategory C76 (ill-defined site), unless the type of tumor indicates origin from a particular tissue. This rule also applies to phrases such as “in the area of” or “in the region of”

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Rule B Examples

- Code paratracheal malignancy NOS to C76.1 (thorax NOS)
- However if you know the type of tissue, see Rule A: code paratracheal sarcoma NOS to C49.3 (soft tissue of thorax) since sarcoma is primarily a soft tissue tumor
- Before using C76 look up the term: retrocecal tissue NOS is C48.0, retroperitoneum, not C76.3, ill defined pelvis NOS

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Rule C Subsite

- Use subsite code “.8”, “overlapping lesion”, when a single tumor overlaps the boundaries of two or more subsites & its point of origin cannot be determined
- Use subsite code “.8” when a neoplasm involves two or more separate sites within the same body system and its point of origin cannot be determined (See ICD-O-3 Table 17 page 25)

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Rule C Examples

- Code a single tumor that overlaps the upper outer and lower outer quadrants of the breast to C50.8
- Carcinoma of tip and ventral surface of tongue is coded C02.8

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Rule D
Topography Codes For Lymphoma

- If the site of origin of the lymphoma is in the lymph nodes, code to *C77*
- If a lymphoma involves multiple lymph node regions **only** and it is unknown where the cancer arose, code *C77.8*, lymph nodes of multiple regions

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Rule D
Topography Codes For Lymphoma

- Code extranodal lymphomas to the site of origin, which may not be the site of the biopsy
- If no site is indicated and the lymphoma is suspected to be extranodal, code to *C80.9*, unknown primary site

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Rule D
Topography Codes For Lymphoma

- If it is clear that a specific lymph node is the primary site, it should be coded as such.
- If not, lymph nodes NOS (*C77.9*) is the appropriate code unless the lymphoma is extranodal

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Rule D Examples

- Code lymphoma, NOS to C77.9
- Code a lymphoma involving cervical, axillary, and inguinal lymph nodes to C77.8

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Rule D Examples

- Code a lymphoma arising in the stomach to C16.9
- Code a lymphoma involving the brain and lung with no lymph node involvement to C80.9

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Rule E Topography Code For Leukemia

- Code all leukemias to C42.1, bone marrow (except myeloid sarcoma 9930/3)
- Myeloid sarcoma is a leukemic deposit in an organ or tissue and should be coded to the site of origin

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Rule F Behavior Code In Morphology

- Use the appropriate 5th digit behavior code even if the exact term is not listed in ICD-O
- If the pathologist states that the behavior differs from the usual behavior as given in ICD-O, code as the pathologist indicates

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Rule F Examples

- Code “benign chordoma” 9370/0
(Chordoma, NOS is indexed 9370/3)
- Code “in situ Paget disease of breast” 8540/2
(Paget Disease of breast is indexed 8540/3)

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Rule G Grade Or Differentiation Codes

- Assign the highest grade or differentiation code described in the diagnostic statement

Gr I (Well Diff)
Gr II (Moderately Diff) Low Grade
Gr III (Poorly Diff) Medium Gr
Gr IV (Undiff/Anaplastic) High Grade

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Rule G
Immunophenotype Codes For
Lymphomas & Leukemias

- This code is also used for denoting the cell lineage or Immunophenotype for lymphomas & leukemias; T, B, Null, or NK cell origin
- The immunophenotype code takes precedence over other terms for grade or differentiation

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Rule G
Immunophenotype Codes For
Lymphomas & Leukemias

- Code Immunophenotype
- 5 T-cell
- 6 B-cell (Pre B-cell, B-precursor)
- 7 Null cell (Non-T/Non-B)
- 8 NK cell (Natural Killer cell)
- 9 Cell type not determined, not stated

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Gleason's Score/Pattern/Grade

- Code Score Pattern Grade
- 1 2,3,4 1,2 1 Well Diff
- 2 5,6 3 2 Mod Diff
- 3 7,8,9,10 4,5 3 Poor Diff

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Two Grade Coding System

<u>Grade</u>	<u>Description</u>	<u>Code</u>
1/2	Low Grade	2
2/2	High Grade	4

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Three Grade Coding System

<u>Grade</u>	<u>Description</u>	<u>Code</u>
I/II	low grade	2
II/III	medium grade	3
III/III	high grade	4

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Grade Or Differentiation As Part Of Histologic Code

- Words such as anaplastic, well differentiated, etc. when used as an integral part of the histologic type should be used to code both histologic type and grade
- Example - Code malignant anaplastic teratoma to 9082/34

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Rule G Examples

- Code well to moderately differentiated adenocarcinoma 8140/32
- Code T-cell lymphoma 9702/35
- Code adenocarcinoma of the prostate Gleason's score 6 (moderately differentiated) to 8140/32

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Grading Tips

- If a needle bx or incisional biopsy of a primary site has a grade given and the excision or resection does not, code the information from the needle/incisional biopsy
- If there is a difference between the grade given for a biopsy of the primary site and the grade given for the resection, use the higher grade

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Grading Tips

- Code grade to 9 if there is no grade provided for the primary site, even if a grade is given for a metastatic site
- Code grade 9 when primary site is unknown (C80.9)
- Code the grade for in-situ lesions if it is stated

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Rule H Site-Associated Morphology Terms

- Use the topography code provided in parenthesis beside the morphology code in ICD-O when a topographic site is not stated in the diagnosis
- The topography code provided by ICD-O should be disregarded if the tumor is known to arise at another site

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Rule H Examples

- Code the primary site for nephroblastoma to C64.9 (kidney)
- Code the primary site for infiltrating duct carcinoma of the pancreas to C25.9 (pancreas)

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Rule H Pseudo-topographic Morphology

- Certain neoplasms have names that could be interpreted as implying a topographic location, but these tumors should not necessarily be coded to that site

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Rule H Examples

- Bile duct carcinoma is a specific histologic type frequently found in both the intrahepatic bile ducts (C22.1), and the extrahepatic bile ducts (C24.0)
- Carcinoma, intestinal type usually occurs in the stomach (C16.9), not the intestines (C26.0)

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Rule J Compound Morphology Diagnosis

- Not all forms of compound words are listed in ICD-O
- Change the order of the word roots in a compound term if the term is not listed

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Rule J Example

- Fibromyxosarcoma (8811/3) is in ICD-O but Myxofibrosarcoma is not. Code both to 8811/3 since both compound terms share identical word roots, although inverted, they are the same disease process

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Rule K Coding Multiple Morphology Terms

- When no single morphology code includes all diagnostic terms, use the numerically higher code if the diagnosis of a single tumor includes 2 or more modifying adjectives with different code numbers
- If a combination code exists use it
- If not, use the numerically higher morphology code

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Rule K Examples

If A Combination Code Exists:

- Code ductal and lobular carcinoma to 8522/3, not 8500/3 (Ductal carcinoma), and not 8520/3 (Lobular carcinoma)

If No Combination Code Exists:

- Code transitional cell epidermoid carcinoma to 8120/3
Transitional cell carcinoma (8120/3)
Epidermoid carcinoma (8070/3)

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Final Pathologic Diagnosis

- Always code the final pathologic diagnosis

Exception: at times the final diagnosis is "NOS" (carcinoma NOS, melanoma NOS, etc.). Code the histology from the microscopic description or comment if it identifies a more specific histologic type

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Most Explicit Path Report

- Review all pathology reports
- Reports based on specimens from the definitive cancer directed surgery are usually the most explicit
- Exception: When the biopsy removes all of the tumor

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Cancer And Carcinoma

- The terms “cancer” and “carcinoma” **are not** synonymous. Consider “cancer” the same as “malignant neoplasm NOS” (8000/3)
- Code cancer to 8000/3
- Code carcinoma to 8010/3

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Other Site Specific Morphology Codes

- Code Waldenstrom Macroglobulinemia to C42.0 (blood)
- Kaposi Sarcoma - Record the primary site in which it arises. Record skin, NOS (C44.9) if no primary site is identified
- Code unknown primary to C80.9

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Mixed Or Multiple Histologies Principal Tumor Type

- Phrases such as “predominantly” and “with features of” are often used to identify the principal tumor type. Code to this histology when no combination code exists

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Mixed Or Multiple Histologies Non-principal Tumor Type

- The phrases “with foci of”, “areas of” or “elements of” do not describe the majority of the tumor. Do not code the histologies described by these terms unless there is a combination code

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Helpful Hints

- Include all adjectives when determining the correct code
- Whenever possible avoid using ill-defined site or unknown primary codes. Try to speak with the physician to locate a specific primary

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Helpful Hints

- Carcinomas do not arise in the brain, bone, or soft tissue except in rare instances. Double check to make sure these are not metastatic deposits

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Nodal/Extranodal Lymphoma

- If it is clear that a specific lymph node was the primary site, code it as the primary
- If a lymphoma arises in lymph nodes, but the site of origin can't be determined, code lymph nodes NOS, *C77.9*
- If a lymphoma involves multiple lymph node regions with no extranodal involvement, code *C77.8*
- Code lymphomas that arise in extranodal sites to the site of origin
- If the lymphoma involves both lymph nodes and an extranodal site or sites and the primary is unknown, code to *C80.9* (unknown primary)

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Reportable/Non Reportable Neoplasms

- Benign and borderline brain and central nervous system tumors are reportable as historical cases to FCDS if they were diagnosed prior to 1/1/04 and the patient has another active reportable neoplasm on or after 1/1/04
- Benign and borderline brain and central nervous system tumors diagnosed on or after 1/1/04 must be reported to FCDS

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Reportable/Non Reportable Neoplasms

- Squamous Intraepithelial Neoplasia of the Vulva, Vagina and Anus (VIN III, VAIN III, AIN III) are reportable if diagnosed on or after 1/1/2001
- Squamous Intraepithelial Neoplasia of the Vulva, Vagina and Anus (VIN III, VAIN III, AIN III) are reportable as historical cases if diagnosed before 1/1/2001 and the patient has another active reportable neoplasm on or after 1/1/01

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Reportable/Non Reportable Neoplasms

- Any cancer with an ICD-O-3 Behavior Code of /2 (In situ) or /3 (Malignant) is reportable to FCDS
- In situ carcinoma of the cervix (CIS), intraepithelial neoplasia of the cervix (CIN III) and intraepithelial neoplasia of the prostate (PIN III) are not reportable
- Basal cell carcinoma and squamous cell carcinoma of non genital skin sites are not reportable. All other malignant neoplasms of the skin are reportable

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Reportable/Non Reportable Neoplasms

- The following morphology terms of borderline behavior are reportable to FCDS as historical cases if they were diagnosed prior to 1/1/01 and the patient has another active reportable neoplasm on or after 1/1/01: 8931/1 9960/1 9981/1 9989/1 9393/1 9961/1 9982/1 9538/1 9962/1 9983/1 9950/1 9980/1 9984/1

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ICD-O-3 Errata

- Since publication of the hardcover version of ICD-O-3 in June 2000, two sets of errata have been created that offer corrections for a number of errors and discrepancies that appear in the original document
- The first errata is dated May 22, 2001
- The second errata is dated May 6, 2003
- FCDS highly recommends that you transcribe the information offered in these errata into your ICD-O-3 books to avoid coding topography and morphology incorrectly
- Errata and clarifications for ICD-O-3 are available on the SEER website at <http://seer.cancer.gov/icd-o-3/>

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ICD-O-3: Conclusion

- This concludes our presentation on the International Classification of Diseases for Oncology 3rd Edition
- Please feel free to view all of the other web based training modules available on our website
- FCDS would like to thank you for your participation and your support

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